What is claimed is:

1. A network terminal constituting a network system which is made up of a plurality of network terminals being capable of transmitting and receiving data and manages transmitting and receiving of data in accordance with a synchronization information frame periodically supplied from one of said plurality of network terminals which operates as a master terminal,

said network terminal comprising:

synchronization information frame receiving means for receiving the synchronization information frame from said master terminal;

network information managing means for managing the network by being synchronized with the synchronization information frame received by the synchronization information frame receiving means;

synchronization information frame missing detection means for detecting a missing of the synchronization information frame from said master terminal, when the synchronization information frame receiving means does not receive the synchronization information frame;

synchronization information transmission start time storing means for storing synchronization information frame transmission start time information which defines a

synchronization information frame transmission start time, said plurality of network terminals having different synchronization information frame transmission start times; and

synchronization information frame transmitting means for, in a case where said network terminal acts as a new master terminal of the network system, periodically outputting a synchronization information frame including at least a part of information in the synchronization information frame received from said master terminal, from the synchronization information frame transmission start time defined by the synchronization information frame transmission start time information stored in the synchronization information transmission start time storing means, synchronization information frame transmitting means starting to output the synchronization information frame after the synchronization information frame missing detection means detects the missing of the synchronization information frame,

after the synchronization information frame missing detection means detects the missing of the synchronization information frame, the synchronization information frame receiving means awaiting for a synchronization information frame from one of said plurality of network terminals whose synchronization

information transmission start time is earlier than the synchronization information transmission start time of said network terminal, until the synchronization information frame transmission start time of said network terminal comes.

2. The network terminal as defined in claim 1, further comprising synchronization information frame transmission start time generating means for determining sets of synchronization information frame transmission start time information corresponding to said plurality of network terminals of the network system, and transmitting the sets of synchronization information frame transmission start time information to said plurality of network terminals, when said network terminal acts as a master terminal.

3. The network terminal as defined in claim 1, wherein, the synchronization information frame transmission start time information indicates priorities of said plurality of network terminals of the network system, for selecting a master terminal.

4. The network terminal as defined in claim 2, wherein, the synchronization information frame

transmission start time information indicates priorities of said plurality of network terminals of the network system, for selecting a master terminal.

5. The network terminal as defined in claim 2, wherein, the synchronization information frame transmission start time information generating means determines the sets of synchronization information frame transmission start time information, on ground of capabilities of said plurality of network terminals as a master terminal of the network system.

6. The network terminal as defined in claim 2, wherein, the synchronization information frame transmission start time information generating means determines the sets of synchronization information frame transmission start time information, on ground of priorities of sets of data transmitted from said plurality of network terminals.

7. The network terminal as defined in claim 3, wherein, the synchronization information frame transmitting means determines the synchronization information frame transmission start time, on ground of a time calculated by multiplying said priorities by a

predetermined unit time.

8. The network terminal as defined in claim 4, wherein, the synchronization information frame transmitting means determines the synchronization information frame transmission start time, on ground of a time calculated by multiplying said priorities by a predetermined unit time.

9. The network terminal as defined in claim 1, wherein, if it is impossible to generate a synchronization information frame including all sets of information in the synchronization information frame received from said master terminal, the synchronization information frame transmitting means determines which set of information is included in a synchronization information frame, in accordance with priorities of sets of data exchanged between said plurality of network terminals.

10. A network system which is made up of a plurality of network terminals being capable of transmitting and receiving data and manages transmitting and receiving of data in accordance with a synchronization information frame periodically supplied from one of said plurality of network terminals which operates as a master terminal,

a network terminal, which is one of said plurality of network terminals, comprising:

synchronization information frame receiving means for receiving the synchronization information frame from said master terminal;

network information managing means for managing the network by being synchronized with the synchronization information frame received by the synchronization information frame receiving means;

synchronization information frame missing detection means for detecting a missing of the synchronization information frame from said master terminal, when the synchronization information frame receiving means does not receive the synchronization information frame;

synchronization information transmission start time storing means for storing synchronization information frame transmission start time information which defines a synchronization information frame transmission start time, said plurality of network terminals having different synchronization information frame transmission start times; and

synchronization information frame transmitting means for, in a case where said network terminal acts as a new master terminal of the network system, periodically outputting a synchronization information frame including

at least a part of information in the synchronization information frame received from said master terminal, from the synchronization information frame transmission start time defined by the synchronization information frame transmission start time information stored in the synchronization information transmission start time storing means, synchronization information frame transmitting means starting to output the synchronization information frame after the synchronization information frame missing detection means detects the missing of the synchronization information frame,

after the synchronization information frame missing detection means detects the missing of the synchronization information frame, the synchronization information frame receiving means awaiting for a synchronization information frame from one of said plurality of network terminals whose synchronization information transmission start time is earlier than the synchronization information transmission start time of said network terminal, until the synchronization information frame transmission start time of said network terminal comes.

11. The network system as defined in claim 10, wherein, said network terminal further comprising

synchronization information frame transmission start time generating means for determining sets of synchronization information frame transmission start time information corresponding to said plurality of network terminals of the network system, and transmitting the sets of synchronization information frame transmission start time information to said plurality of network terminals, when said network terminal acts as a master terminal.

12. The network system as defined in claim 10, wherein, the synchronization information frame transmission start time information indicates priorities of said plurality of network terminals of the network system, for selecting a master terminal.

13. The network system as defined in claim 11, wherein, the synchronization information frame transmission start time information indicates priorities of said plurality of network terminals of the network system, for selecting a master terminal.

14. A method of controlling a network terminal constituting a network system which is made up of a plurality of network terminals being capable of transmitting and receiving data and manages transmitting

and receiving of data in accordance with a synchronization information frame periodically supplied from one of said plurality of network terminals which operates as a master terminal,

the method comprising the steps of:

detecting a missing of the synchronization information frame from said master terminal, when the synchronization information frame is not supplied from said master terminal;

in a case where said network terminal acts as a new master terminal of the network system, periodically outputting a synchronization information frame including at least a part of information in the synchronization information frame received from said master terminal, from the synchronization information frame transmission start time defined by the synchronization information frame transmission start time information stored in the synchronization information transmission start time storing means, after detecting the missing of the synchronization information frame; and

awaiting for a synchronization information frame from one of said plurality of network terminals whose synchronization information transmission start time is earlier than the synchronization information transmission start time of said network terminal, until the

synchronization information frame transmission start time of said network terminal comes.

15. A program for causing a computer to operate as sections of a network terminal constituting a network system which is made up of a plurality of network terminals being capable of transmitting and receiving data and manages transmitting and receiving of data in accordance with a synchronization information frame periodically supplied from one of said plurality of network terminals which operates as a master terminal,

said network terminal comprising:

synchronization information frame receiving means for receiving the synchronization information frame from said master terminal;

network information managing means for managing the network by being synchronized with the synchronization information frame received by the synchronization information frame receiving means;

synchronization information frame missing detection means for detecting a missing of the synchronization information frame from said master terminal, when the synchronization information frame receiving means does not receive the synchronization information frame;

synchronization information transmission start time

storing means for storing synchronization information frame transmission start time information which defines a synchronization information frame transmission start time, said plurality of network terminals having different synchronization information frame transmission start times; and

synchronization information frame transmitting means for, in a case where said network terminal acts as a new master terminal of the network system, periodically outputting a synchronization information frame including at least a part of information in the synchronization information frame received from said master terminal, from the synchronization information frame transmission start time defined by the synchronization information frame transmission start time information stored in the synchronization information transmission start time storing means, synchronization information frame transmitting means starting to output the synchronization information frame after the synchronization information frame missing detection means detects the missing of the synchronization information frame,

after the synchronization information frame missing detection means detects the missing of the synchronization information frame, the synchronization information frame receiving means awaiting for a

synchronization information frame from one of said plurality of network terminals whose synchronization information transmission start time is earlier than the synchronization information transmission start time of said network terminal, until the synchronization information frame transmission start time of said network terminal comes.